

Claims

1. Apparatus for picking articles situated on retrieval pallets in a pallet rack, comprising a vehicle capable of travelling along the picking front of the pallet rack and having a first lifting device with a height-adjustable picker carrying device for the picker and having a second lifting device with a height-adjustable pallet-carrying device for an order pallet, wherein the picker-carrying device and the pallet carrying device are positionable heightwise relative to the respective retrieval position independently of one another.

2. The apparatus according to claim 1, wherein the vehicle further comprises a base on which, viewed in travelling direction A, at its one end the first lifting device and at its other end the second lifting device is disposed.

3. The apparatus according to claim 2, wherein each lifting device further comprises a vertical frame, along which the respective carrying device is vertically displaceable.

4. The apparatus according to claim 1, wherein the picker-carrying device and the pallet carrying device are, in plan view, disposed opposite one another.

5. The apparatus according to claim 1, wherein the vehicle (10) is rail-mounted.

6. The apparatus according to claim 1, wherein the picker-carrying device further comprises a circumferential crash guard for the picker.

7. The apparatus according to claim 1, wherein, above the order pallet, the pallet-carrying device comprises a terminal for displaying the picking positions.

8. The apparatus according to claim 1, wherein the picker-carrying device further comprises a dead man's switch.

9. The apparatus according to claim 8, wherein the dead man's switch is additionally designed for acknowledging the pick.

10. The apparatus according to claim 1, wherein the pallet-carrying device comprises a load receiving means for receiving and delivering the order pallet.

11. The apparatus according to claim 10, wherein the load receiving means is designed so as to enable transporting of the order pallet at right angles to the travelling direction (A) of the vehicle.

12. The apparatus according to claim 1, wherein the pallet-carrying device comprises a sensor device for determining the degree of charging of the order pallet.

13. The apparatus according to claim 1, wherein the travel of the vehicle and of the lifting devices to the respective retrieval positions and/or transfer positions is controllable by means of a control computer.

14. The apparatus according to claim 13, wherein the height of the picker-carrying device at the respective retrieval position is controllable on the basis of the residual stock quantity of the articles on the retrieval pallet.

15. Apparatus according to claim 13, wherein the height of the pallet-carrying device at the respective retrieval position is controllable on the basis of the degree of charging of the order pallet

16. The apparatus according to claim 15, wherein the height of the picker-carrying device and/or of the pallet-carrying device at the respective retrieval position is correctable by a specific amount individually for each picker.

17. The apparatus according to claim 13, wherein the heights preset by the controller are manually correctable by the picker.

18. The apparatus according to claim 1, wherein the travelling movement of the vehicle and the lifting movements of the lifting devices are optionally effected simultaneously.

19. The apparatus according to claim 1, wherein the picker-carrying device comprises a standing seat for the picker.

20. The apparatus according to claim 1, wherein the power transmission to the vehicle is effected via a contact line.

21. The apparatus according to claim 1, wherein the transfer of data to the vehicle is effected via data light barriers.